

Pediatric Emergency Department and Urgent Care Utilization for Non-traumatic Dental Conditions

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Introduction and Purpose

- Barriers to preventive dental care and lack of dental home can lead to neglect of dental health, leading to severe dental pain, infection, and swelling. These preventable dental conditions are particularly worrisome in pediatric patients and prompt individuals to seek relief in an urgent care or emergency department, which are ill equipped to address these dental needs.
- Significant cost and time savings would be observed if non-traumatic dental care in emergency department or urgent cares was diverted to a traditional dental setting.
- The retrospective chart review evaluates trends and patient demographics in pediatric patients seeking non-traumatic dental care in local emergency department and urgent care sites.

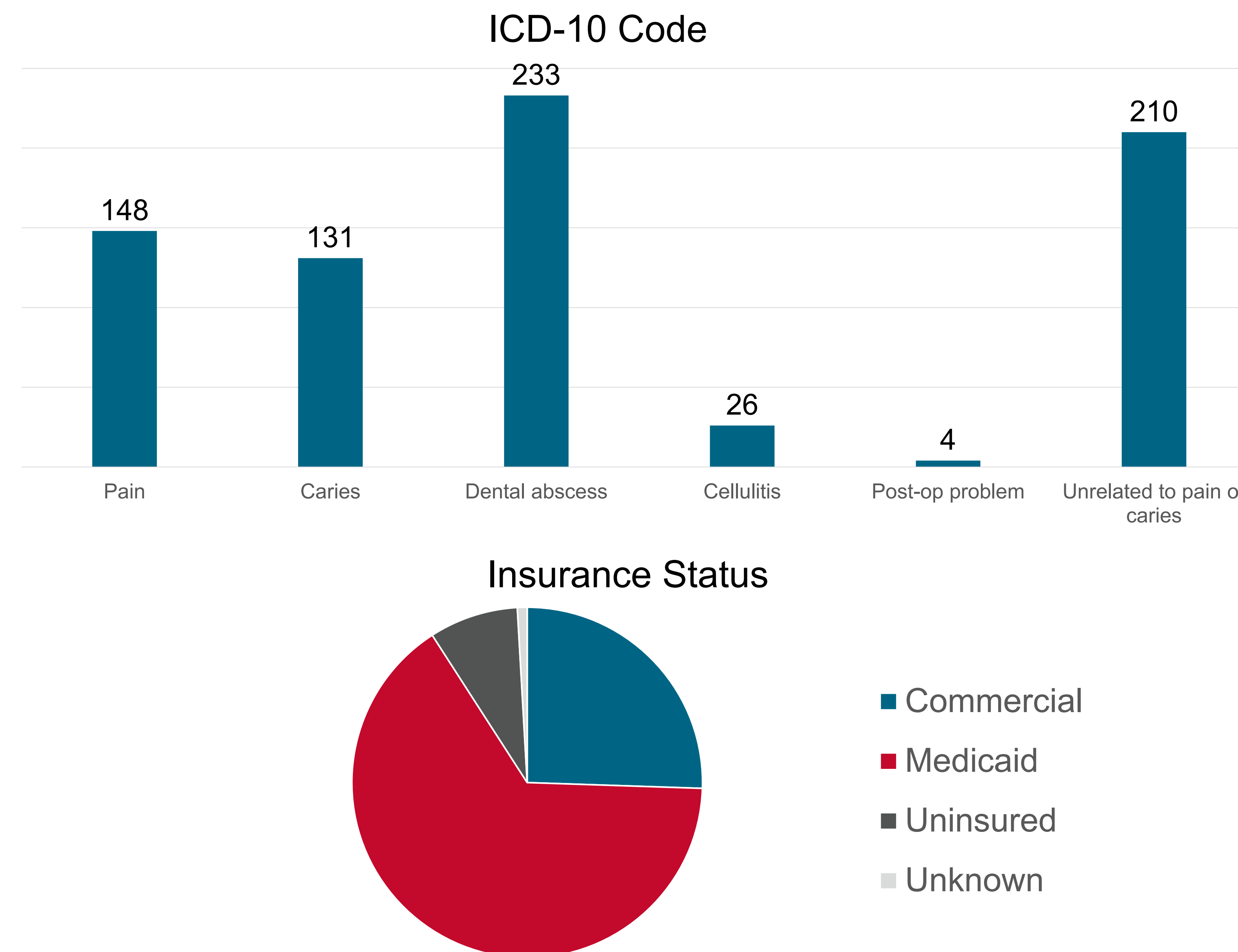
Objectives

- The purpose of the study was to evaluate trends and patient demographics in pediatric patients seeking non-traumatic dental care in any emergency department or urgent care site affiliated with two local hospital systems, University of Nebraska Medical Center (UNMC) or Children's Hospital & Medical Center (CHMC)
- Additionally, this study investigated if there is an association between a patient's zip code and insurance status for the patients included in this study

Methods and Data Analysis

- EHR query was performed by data analysts at UNMC and CHMC to include all visits within the years 2016 through 2020 to any UNMC or CHMC emergency department or urgent care site.
- All patients age 18 and under were included for every visit which was coded with an ICD-10 diagnosis code for a nondramatic dental condition – all trauma codes were excluded from search.
- Demographic information that was collected for each visit included gender, race, ethnicity, zip code, primary language and insurance status.
- 752 encounters met search criteria and SPSS was utilized for data analysis.
- Descriptive statistics and analysis were conducted using chi-square comparing insurance status and zip code.

Results



Insurance Status by Zip Code Category



Data Analysis

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	78.709 ^a	5	.000
Likelihood Ratio	80.405	5	.000
Linear-by-Linear Association	10.055	1	.002
N of Valid Cases	683		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.18

It should be noted that those with no insurance or unknown insurance coverage were excluded from the analyses due to low frequencies (69 visits)

Results and Discussion

- A chi-square analysis revealed a significant relationship between payor type and place of residence among those who accessed UNMC or CHMC emergency department or urgent care site for a non-traumatic dental reason
- $\chi^2(5)=78.71, p<.05$
- Specifically, patients with zip codes in NE and SE Douglas County were more likely to have Medicaid than private insurance
- Additionally, those with zip codes in SW Douglas, Sarpy or other non-Douglas/Sarpy counties were more likely to have private insurance
- Those in NW Douglas county had roughly equal proportions of patients with Medicaid and private insurance

Conclusions

- Regardless of where patients came from, patients with Medicaid more frequently accessed emergency or urgent care sites for non-traumatic dental problems
- Low frequency of uninsured patients sought non-traumatic dental care in emergency or urgent care setting, further analysis would be necessary to evaluate the extent of financial barriers for the uninsured
- One major limitation of the study is that medical providers with less proficiency in dental terminology are responsible for assigning the ICD-10 diagnosis code to the visit
- Study is a foundation for further analysis of barriers to preventive dental care in the Omaha and surrounding areas; policies may be informed such that preventive dental care is accessible and education is provided to families to seek non-traumatic dental care in traditional dental setting.

Select References

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